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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,832	04/14/2004	Masatoshi Homan	17640	5643
23389	7590	09/30/2005		
SCULLY SCOTT MURPHY & PRESSER, PC 400 GARDEN CITY PLAZA SUITE 300 GARDEN CITY, NY 11530			EXAMINER KASZTEJNA, MATTHEW JOHN	
			ART UNIT 3739	PAPER NUMBER

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/823,832

Applicant(s)

HOMAN ET AL.

Examiner

Matthew J. Kasztejna

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/14/04, 9/1/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 7 12 and 17-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-8, 10, 12-13, and 15 rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication No. 2003/0117491 to Avni et al.

In regards to claim 1, Avni et al disclose a capsule endoscope apparatus having an illuminating device 38, an image pick-up device 32 for picking up an image of an illuminated portion, and a radio transmitting device 34, the capsule endoscope

apparatus comprising: the illuminating device 40 comprising a switching device which switches two or more light-emitting amount or light-emitting time; and a radio device 34 which transmits by radio waves image data obtained by the image pick-up device upon sequentially switching the two or more light-emitting amount or light-emitting time (see Fig. 2 and paragraphs 0039-42).

In regards to claim 2, Avni et al disclose a capsule endoscope apparatus further comprising: a setting device which sets the light-emitting amount or light-emitting time (see paragraphs 0057-64).

In regards to claim 3, Avni et al disclose a capsule endoscope apparatus, wherein the setting device is a storing device which stores information for setting the light-emitting amount or light-emitting time (see paragraph 0071).

In regards to claims 4-6, Avni et al disclose a capsule endoscope apparatus, wherein the illuminating device comprises a white LED (see paragraph 0039) wherein the illuminating device comprises an electroluminescence.

In regards to claim 6, Avni et al disclose a capsule endoscope apparatus, wherein a signal gain of the image pick-up device is proportional to the light-emitting amount or light-emitting time (see paragraph 0719).

In regards to claims 7 and 12, Avni et al disclose a capsule endoscope apparatus having an illuminating device, an image pick-up device for picking up an image of an illuminated portion, and a radio transmitting device, the capsule endoscope apparatus comprising: the illuminating device comprising a switching device which switches two or more light-emitting amount or light-emitting time (see Fig. 2 and

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paragraphs 0039-42); a selecting device which extracts an image with a wide dynamic range from the two or more pieces of image data obtained by the image pick-up device upon sequentially switching the two or more light-emitting amount or light-emitting time (see Fig. 13 and paragraphs 0152-157); and a radio device 34 which transmits by radio waves the image data obtained by the selecting device (see paragraph 0036).

In regards to claims 8, 10, 13 and 15, Avni et al disclose a capsule endoscope apparatus, wherein the luminance distribution of the image data is used as a comparison standard for extracting the image with the wide dynamic range by the selecting device (see paragraphs 0070-0074).

In regards to claim 19, Avni et al disclose a capsule endoscope apparatus having an illuminating device, an image pick-up device for picking up an image of an illuminated portion, and a radio transmitting device, the capsule endoscope apparatus comprising: the illuminating device comprising a switching device which switches the amount of illuminating light emitted by a light-emitting device; and the radio transmitting device which transmits by radio waves a plurality of pieces of image data obtained by the image pick-up device with two or more different amount of illuminating light (see Figs. 11-12).

In regards to claim 20, Avni et al disclose a capsule endoscope apparatus, wherein the illuminating device has a plurality of light-emitting elements at different arranging positions, and the switching device selects the light-emitting element which emits light from the plurality of light emitting element and changes the property of light distribution for the illuminating light (see Figs 11-12 and paragraphs 0129-136).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17-18 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2003/017491 to Avni et al. in view of EP 0912047 to Matsumoto et al.

In regards to claims 17-18, Avni et al. disclose a capsule endoscope apparatus having an illuminating device, an image pick-up device for picking up an image of an illuminated portion, and a radio transmitting device, the capsule endoscope system comprising: the illuminating device comprising a switching device which switches two or more light-emitting amount or light-emitting time; a radio device which transmits by radio waves two or more image data obtained by the image pick-up device upon sequentially switching the two or more light-emitting amount or light-emitting time but is silent with respect to an image processing device which generates one piece of combined image with an enlarged dynamic range from two or more pieces of image data. Matsumoto et al. teach of an analogous imaging apparatus comprising means for expanding the dynamic range of the images. Matsumoto et al. teach of a system wherein when a luminance level is low, the ratio of the first image signal, which has been produced during the longer exposure time, to the second image signal is increased. This results in an image demonstrating a high signal-to-noise ratio. When the luminance level is high

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the ratio of the second image signal, which has been produced during the shorter exposure time, to the first image signal is increased (see Fig. 2). This results in a synthetic image that provides a wide dynamic range, depicts a smoothly varying brightness level, and exhibits a characteristic of being seen almost natural. It would have been obvious to one skilled in the art at the time the invention was made to include an image processing device in the apparatus of Avni et al. in order to produce a single image with a large dynamic range from first and second image signals as taught by Matsumoto et al.

Allowable Subject Matter

Claims 9, 11, 14 and 16 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Kasztejna whose telephone number is (571) 272-6086. The examiner can normally be reached on Mon-Fri, 8:30-6:00.

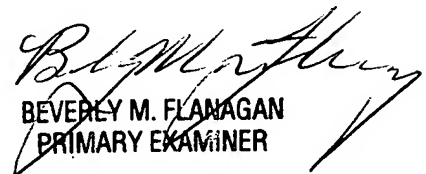
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJK *ME*

9/23/05


BEVERLY M. FLANAGAN
PRIMARY EXAMINER